

dent (1, 13, and 27). These are cancelled by this amendment and replaced by a set of 21 claims, four of which are independent (29, 34, 39, and 45), and the remaining, dependent. Thus, a surcharge for one extra independent claim is due, and it is included in the Fee Transmittal with the RCE and Extension of Time fees due and payable upon the filing of this reply. All the documents accompany this reply.

This application is a national phase entry of PCT/GB99/02970, filed internationally on 7 September 1999, claiming benefit of GB 9819484.8, filed 7 September 1998. It discloses peptide fragments of cholera toxin B or enterotoxin B useful primarily as vaccine adjuvants, but also for the treatment and prevention of a variety of diseases including autoimmune disease, human T cell leukaemia, transplant rejection or graft-versus-host disease, allergies, and infectious diseases, particularly for diarrhoea (both cholera and enterotoxin-mediated diarrhoeal disease). Applicants are University of Bristol researchers involved in continuing investigations related to this important area of research. Recent findings in this ongoing work have prompted Applicants to request that the U.S. Patent Office examine claims divided by a Restriction Requirement into Group V directed to methods using peptides of the invention (claims 22-26 and 28), rather than the Group II claims drawn to the peptides themselves (claims 13-18 and 27) elected with traverse on 25 July 2001 and examined prior to issuance of the above-referenced Office Action.

Therefore, Applicants are filing a Request for Continued Examination (RCE) of claims directed to treatment methods. So instead of addressing issues raised by the Examiner in her consideration of the Group II peptide claims, this reply to the Office Action cancels the claims and presents others for examination. New drawings are also submitted in response to the Office Action item 3, as required by 37 C.F.R. § 1.85(a).

Claims. This amendment essentially rewrites originally presented Group V claims 22 to 26 and 28, which were all dependent, and presents an independent claim set.

For convenience in reviewing these changes, the claims were cancelled and replaced by new claims.

New claim 29 combines the limitations of former claims 13 and 23, particularly pointing out methods of treating subjects having a disease associated with an immune disorder comprising administering to the subject peptides of the invention. Dependent claims 30 to 33 particularly point out individual peptide groups set out in claim 29, tracking the language of former claims 15 to 18, and supported in the specification on page 16 at line 23.

New claim 34 particularly points out methods of treating subjects having autoimmune disease, human T cell leukaemia, transplant rejection or graft-versus-host disease, allergies, or infectious diseasea disease comprising administering to the subject peptides of the invention. Support for the claim may be found in the specification on page 16, lines 12 to 14 and page 30, lines 11 to 13 (as well as former claim 13). Dependent claims 35 to 38 particularly point out individual peptide groups set out in claim 34, tracking the language of former claims 15 to 18, and supported in the specification on page 16 at line 23.

New claim 39 combines the limitations of former claims 13 and 24, particularly pointing out methods of treating subjects having diarrhoea comprising administering to the subject peptides of the invention. Dependent claim 40 tracks the language of former claim 25. Dependent claims 41 to 43 particularly point out individual peptide groups set out in claim 39, tracking the language of former claims 15 to 18, and supported in the specification on page 16 at line 23.

New claim 45 combines the limitations of former claims 13 and 26, particularly pointing out methods of treating subjects having a toxin-mediated disorder comprising administering to the subject peptides of the invention. Dependent claims 46 to 49


particularly point out individual peptide groups set out in claim 45, tracking the language of former claims 15 to 18, and supported in the specification on page 16 at line 23.

Figures. Eight sheets of corrected drawings are submitted herewith in response to objections made by a draftsman on 3 August 2001 in a PTO Form 948 accompanying the Action. To separately label Figures 2 and 3, sheets originally presented in PCT/GB99/02970 as 2/8, 3/8, 4/8, and 5/8 and labelled "Figure 2, Figure 2 contd...., Figure 3, and Figure 3 contd....", respectively, were denoted --Figures 2A, 2B, 3A, and 3B--. This necessitated a change in the figure description on page 40 at lines 4 to 8 of the specification, amended to substitute "Figure 2" with --Figures 2A and 2B--, and "Figure 3" with --Figures 3A and 3B--. No new matter is presented.

Applicants request early and favorable consideration of this RCE.

If the undersigned can advance the prosecution of this application in any way, the Examiner is invited to call at the number listed below.

Respectfully submitted,



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Marked Up Version of Amendments Required by 37 C.F.R. § 1.121

Specification Page 40, Lines 4 to 8:

[Figure 2] Figures 2A and 2B which [shows] show the identification of loop residues in CtxB involved in CD8+ T-cells apoptosis;

[figure 3] Figures 3A and 3B which [shows] show mutant B subunits defective in DC8+ T-cell apoptosis retain ability to bind to cell surface receptors;